

I. Project Title and Project Purpose Statement

Project Title: Solutions for Climate Resiliency in North Denver EJ Communities

Summary Description and Goals: This project seeks to address the climate resiliency and subsequent public health impacts associated with extreme heat events. The goals of the project include: 1) identify and analyze the vulnerabilities of low-income communities to extreme heat events; 2) prioritize strategies to address these vulnerabilities and develop an Action Plan to implement the strategies; 3) build the capacity of low-income residents to plan an active role in advocating for policies and projects that reflect their own priorities for climate resiliency.

Location: Denver and Commerce City, Colorado. Zip codes: 80216 and 80022

Related Environmental Statutes: This project relates to Clean Air Act, Section 103(b)(3).

Community Climate Resilience Focus: This project will develop an action plan to address the public health impacts in low-income Denver communities resulting from extreme heat events caused by climate change.

II. Environmental, Public Health, and Climate Resiliency Information

Local environmental, public health and climate resiliency issues: This project addresses climate resiliency specific to the public health impacts associated with extreme heat events. The City of Denver's Climate Adaptation Plan recognizes increase in temperature and urban heat island effect as a key potential climate change impact for Denver. A Natural Resource Defense Council study estimates by mid-century Denver's number of extreme heat days will increase by 79 days for a total of 88 extreme heat days per summer, causing an increase in the adverse effects on human health and the environment¹. Extreme heat events can cause a range of health problems including heat stroke and ultimately death. Exposure to extreme heat can also aggravate pre-existing diabetes, respiratory illnesses, and nervous system disorders². Additionally, hot, sunny days can result in an increased rate of ground level ozone formation. Ground-level ozone exposure can cause harmful cardiopulmonary health effects, including shortness of breath and aggravation of lung diseases such as asthma, emphysema, and chronic bronchitis³.

Results achieved from the efforts to address the local climate resiliency issues: In 2007, Denver issued the Climate Action Plan with strategies to achieve a 2020 goal to reduce emissions to below 1990 levels. The interim 2012 goal set in the plan has been met, and an update to the plan with 2020 strategies is due to be issued before 2015. In 2014, the City of Denver issued a Climate Adaptation Plan that includes an analysis of system vulnerabilities and how these impact the responsibilities of various City departments. Adams County has yet to develop climate-specific plans, but they have developed an internal sustainability plan and will be developing an Emergency Management Plan in the near future.

Over the last six years, Groundwork Denver (GWD) has engaged over 25,000 households in climate mitigation and adaptation efforts such as energy efficiency improvements, recycling, tree planting, and alternative transportation, while also saving money, beautifying neighborhoods, raising awareness about emergency preparedness, and increasing physical activity.

¹ City and County of Denver Climate Adaptation Plan, Denver Environmental Health, 2014, p.11.

² Minnesota Extreme Heat Toolkit, Minnesota Department of Health, 2012.

³ City and County of Denver Climate Adaptation Plan, Denver Environmental Health, 2014, p.9.

Characteristics of the affected communities: This project will be focused in North Denver (Globeville, Elyria and Swansea neighborhoods) and Commerce City, Colorado. The population of the target area is 20,045. Approximately 32% of the residents in the target area live below the federal poverty level. This poverty rate is almost twice the poverty rate of Denver and Adams Counties as a whole (14% in Adams and 19% in Denver). The target area demographics include: 71% Latino, 24% non-Latino White, and 5% other, compared to 34% Latino, 53% non-Latino White, and 13% other in the combined Adams and Denver counties as a whole. Almost 27% of the target area residents were foreign born and 35% of adults speak Spanish at home. The construction of I-25 in the 1950s and I-70 in the 1960s cut these neighborhoods off from the rest of the City of Denver, causing neighborhood cohesion problems and increased public health risk due to diesel particulate emissions from the transportation corridors. Highway access brought additional industrial activity creating islands of residences surrounded by industry and highways.

Disproportionate impact: The public health impacts of extreme heat events are known to disproportionately impact certain vulnerable populations including the elderly, infants and children, and people with chronic medical conditions. Additionally, certain characteristics of low-income communities increase vulnerability including: 1) poor housing stock (less insulation, fewer air conditioners leading to warmer indoor temperatures); 2) greater urban heat island effect (fewer trees, less green space, more roads/parking lots leading to warmer outdoor temperatures); 3) less mobility (fewer vehicles per person, inadequate built environment for biking/walking, inadequate public transportation making it more difficult to get to health care facilities, pharmacies, or cooling centers); 4) lower social cohesion (language barriers, crime, fewer opportunities for social interaction leading to less information sharing and less “checking up on” vulnerable residents); and 5) poor communication systems (lower penetration of internet access and smart phones, and fewer neighborhood newspapers leading to less knowledge of health impacts, emergency preparedness, public warnings). Characteristics that directly or indirectly suggest vulnerability to extreme heat events in the target communities include the following:

	Target Communities	Community as a Whole
% population under six ¹	9.5%	7.6%
% population speak English less than “very well” ¹	26.3%	12.3%
% population living in poverty	32%	17%
Square miles of parkland per 100,000 people ²	0.8	1.9
Death from cardiovascular disease per 100,000 people ²	213	157
% of households with no telephone service ¹	3.2%	2.8%

¹ 2009-2013 American Community Survey 5-year Estimates. “Community as a Whole” includes all of Denver and Adams Counties. ² *Health of Denver, 2011*. This data is for Denver only. Data compares the City Council District that includes the target communities with the City Council District with the best outcomes.

The first activity of this project will be to analyze in greater depth the vulnerability characteristics of the target neighborhoods as compared to a nearby community of higher wealth.

How the affected community will benefit from the project: The project will help reduce public health impacts associated with climate change, build community capacity to address climate issues, and deliver “co-benefits” to the community. Many cities have begun to develop Climate Adaptation Plans and Emergency Management Plans to mitigate the public health impacts of climate change. The results of this project will focus on integrating specific strategies necessary to address the climate change impact vulnerabilities for low-income communities into such plans, while also building capacity for the community to advocate for these strategies. The strategies

developed will also focus on delivering more immediate “co-benefits” for these residents such as reducing energy bills (insulating attics reduces indoor temperatures and reduces energy bills) and increasing green parks and green space (reducing heat island effect and improving opportunities for social interaction and physical exercise).

III. Organizations Historical Connection to Affected Community

The history of involvement with the affected community: GWD has been involved with the affected communities for twelve years. We became involved because of a need determined through a feasibility study that found while much of Denver is known for its parks and well-maintained streetscapes, an organization like GWD could fill a critical niche to partner with residents in implementing tangible neighborhood-based projects to improve the environment and foster environmental justice.

How GWD has worked with the affected community: GWD has partnered with the community residents to address several local environmental and public health issues including lead poisoning, climate change, contaminated soil, lack of green space and air quality. In a partnership model, GWD brings technical assistance, volunteer support, funding support, organizational support and direct service to the environmental issues that are important to the community. For example in response to the request to assist with air quality issues in North Denver, we partnered with the community leaders to write an EPA EJ Small Grant in 2011. With that grant received, we were able to engage the University of Colorado department of Mechanical Engineering for technical assistance. These engineers developed air sampling protocols, trained residents to collect air quality samples and analyzed the results. The grant paid for the sampling costs and allowed us to identify, train and pay community residents to collect surveys about the impact of odors on the lives of residents.

As another example, over the last eight years, GWD has worked closely with the residents of north Denver on the improvement of approximately five acres of vacant land. Although the site was tested and cleaned up under Superfund, it is poorly maintained and has been plagued by illegal dumping and illicit activities. In our partnering role, we have served as the coordinator to a resident steering committee for the project. On their behalf, we wrote several successful grant applications that allowed the residents to hire a landscape architect to design the site and to engage several technical consultants to complete an environmental review, title work and a land survey. We expect the site to become Denver’s newest natural area and green infrastructure for flood control within the next two years.

As an example of direct service, we have provided over 600 households in Globeville, Elyria-Swansea and Commerce City with energy efficiency improvements. We work directly with low-income families to identify and prioritize their energy efficiency needs and then our staff implements the improvements for no cost to the client.

How the residents of the affected community are part of the decision-making process: GWD works to make sure that the community is integrally involved with decision making on these projects. For example, the work to create a new park in Globeville has been led by a resident Steering Committee. GWD supports the Steering Committee by facilitating meetings, conducting broader community outreach at their direction, and serving as a fiscal agent for grants and donations. Our air quality work was conducted in close partnership with local neighborhood associations to develop and implement the work plan, including air monitoring, community surveying and follow up conversations with local politicians and agency departments.

Additionally, we are always gathering information from community residents to help guide our organizational direction. For example, GWD issues a bi-monthly Spanish-language newsletter that asks readers to contact us with ideas and concerns about the neighborhood; and we collect hundreds of surveys each year through door-to-door outreach asking people to weigh-in on neighborhood-level environmental issues.

Increasing community capacity: Whenever possible, GWD builds community training, leadership opportunities and economic opportunities into our projects to build the community capacity for addressing environmental issues. For example, we have employed community residents as energy auditors, community organizers and researchers and we employ over 40 youth from the communities in which we work throughout the year. Our youth employees are trained in all aspects of our work. As the youth program enters in its eighth year, youth who started with us at age 14 are now taking on leadership roles at GWD and in their communities.

Additionally, many of our projects start with a simple activity or information gathering but lead to the development of a steering committee or advocacy group. For example, we support a “walking club” in north Denver that meets weekly for physical exercise, but also uses the activity to examine and report on the condition of the built environment as it pertains to walking. As their capacity in understanding issues of built environment has increased, several of the walking group members participated in city planning processes and advocated for a walking path around a local park, which was implemented in 2014.

Maintaining and sustaining ongoing relationship: GWD sustains ongoing relationships in the community by supporting projects that are important to the residents, by following through on projects, and by staying with the project as long as needed. We have deep relationships with the residents and are a trusted partner. Involving residents in decision-making, project development, economic opportunities, volunteerism and training also helps build and deepen those relationships.

IV. Project Description

i. Description of the activities the project will undertake

Local environmental, public health and community climate resiliency results: The project seeks to develop and implement strategies that reduce the disproportionate public health impacts in low-income neighborhoods in Denver and Commerce City related to extreme heat events caused by climate change. The specific goals of the project include: 1) identify and analyze the vulnerabilities of low-income communities to extreme heat events; 2) prioritize strategies to address these vulnerabilities and develop an Action Plan to implement the strategies; 3) build the capacity of low-income residents to play an active role in advocating for policies and projects that reflect their own priorities for climate resiliency.

Activity 1: Analysis of Vulnerabilities to Extreme Heat Events: We will analyze the specific vulnerabilities of the residents of the target communities to extreme heat events. This analysis will include three data sources: Census and other publicly available data (e.g. demographics, housing age and condition, tree canopy, crime rates), data generated through other GWD programs and projects (e.g. insulation levels, combustion safety, air conditioning), and survey data collected specifically for this project (walkability/bikeability analysis, social cohesion, communications). Analysis will include review of the following topic areas that are proxies for vulnerability to extreme heat events:

- **Housing:** age of housing, presence of air conditioning, insulation levels, combustion safety and presence of carbon monoxide, overall housing condition, % homeless
- **Heat island effect:** tree canopy, green space per person, % of area that is asphalt/concrete
- **Mobility:** nearby bus routes, vehicles per household, walkability, bikeability
- **Demographics:** % residents >65, % children<5, % non-English speakers
- **Health Indicators:** asthma rates, obesity rates, access to health care, other health status
- **Social Cohesion:** crime rates, presence of social organizations/faith organizations, recreational facilities and other community gathering places.
- **Communications:** internet access, local newspapers/newsletters, smart phone penetration
- **Services:** local warning system, air conditioned public facilities, official cooling centers

As described above, we will collect some of this data directly from the residents of the target communities through key informant interviews and surveying. GWD will conduct interviews with 12 residents who are deeply connected to our target populations (“key informants”). These residents will be asked to provide feedback and various stages of the project as an Advisory Committee. These key informants will be asked to provide information on their perception of extreme heat vulnerability, including issues around social isolation, emergency preparedness, and communications. These interviews will help guide the development of the survey questions that will be administered to 100 residents of the target neighborhoods. The survey will help determine vulnerability characteristics that are difficult to glean from publicly accessible data, like social cohesion, communications, and preparedness. We will recruit survey participants from our existing client base of over 800 low-income households in these neighborhoods. Surveys and interviews will be available in English or Spanish. Participants in the interviews and surveys will be provided with information about how to protect from extreme heat events and resources for emergency preparedness, free insulation/weatherization services, free trees, and other services that will improve resiliency.

The vulnerability analysis will be presented visually using GIS software. North Denver and Commerce City will be analyzed separately. A third comparison neighborhood with higher incomes will also be included in the mapping.

Activity 2: Develop Strategies to Address Extreme Heat Vulnerabilities: We will develop strategies that address the extreme heat vulnerabilities identified in Activity 1. For each strategy developed, we will provide information on: the climate resiliency impact (e.g. how does it address the vulnerability); the cost of the strategy; the best entity to implement the strategy (e.g. individuals, community, community-based organizations, municipality, county, state); and “co-benefits” of the strategy. Co-benefits are the additional benefits that come from the climate resiliency strategy. For example, insulating attics protects from extreme heat events by reducing the temperature of the home. The co-benefit of this strategy is that the energy bills are reduced. In our experience, there are many short-term pressing needs in these low-income communities that can be addressed as co-benefits of climate strategies and that these strategies with co-benefits are of higher priority to the community. We will again call upon our Advisory Committee members, as well as our partners at Denver Environmental Health and Adams County Government, to help us develop an exhaustive list of strategies to address the extreme heat vulnerabilities in these communities.

Activity 3: Prioritize of Strategies: The strategies developed in Activity 2 will be presented back to the initial survey-takers for prioritization and feedback. Participants will be invited to a training

workshop to provide more in-depth information on extreme heat events and the strategies to address vulnerability. The follow-up survey and training will also be used to identify residents with interest in future participation on climate resiliency issues, with the goal of developing a core constituency for ongoing advocacy for these issues.

Activity 4: Pilot Strategies: During the grant timeframe, GWD will be working with at least 150 families in the target neighborhoods on projects such as energy efficiency improvements, bicycle repair, tree planting, and emergency preparedness (all using leveraged funds). This will give us the opportunity to pilot some potential strategies that will address extreme heat events. As we conduct each of these projects, we will collect evaluation data from clients on how these may improve resiliency to extreme heat events. For example, we will collect data on the reduction of indoor temperature by insulating attics, improved knowledge of emergency alert systems after preparedness training, and improved mobility after bicycle giveaways. This information will help feed into the development of the Plan of Action described in Activity 5.

Activity 5: Develop and Distribute Plan of Action: We will develop a plan of action for improving climate resiliency specific to extreme heat events in low-income neighborhoods. The plan will focus on prioritized strategies and will include information on integrating the strategies into various public plans (e.g. Denver Climate Adaptation Plan, Hazard Mitigation Plan, Comprehensive Plans), recommendations for capacity building for resident leaders to continue to advocate for the strategies, and an ongoing communication plan to continue to build a constituency for this issue beyond the end of the grant period. The Plan of Action, in both English and Spanish, will be distributed to the Advisory Committee, other community- and faith-based organizations in the neighborhoods, elected officials, and City/County staff.

Activity: Milestone	Date of Completion (month of grant)
QAPP approved	End of month 1
Activity 1: Key informant interviews	End of month 3
Activity 1: Surveys complete	End of month 3
Activity 1: GIS mapping complete	End of month 5
Activity 2: Strategies developed	End of month 6
Activity 3: Climate resiliency workshop	End of month 7
Activity 3: Prioritization surveys collected	End of month 8
Activity 3: Strategies prioritized	End of month 9
Activity 4: Pilot Strategies Completed	End of month 9
Activity 5: Action Plan Completed	End of month 12
Final Report Completed	60 days after end of grant term

Increasing community capacity: In our experience climate change is not a priority concern for residents of Denver’s low-income neighborhoods due to lack of information about the potential impacts, a sense that the impacts are not imminent, and precedence of more pressing immediate concerns. This project will be a first step to build capacity by educating, engaging, and planning for greater leadership and advocacy in the future. The project will build community capacity to address climate resiliency in the following ways:

- Survey-takers and key informants will be educated about extreme heat events and how vulnerability can be addressed.
- Survey-takers and key informants will be provided with resources to directly reduce their vulnerability to extreme heat events, including emergency preparedness information, free insulation, and free trees. We will ask them to refer other community members for these services

as well, encouraging them to take a leadership role in providing information on climate resiliency strategies.

- Participants will be invited to a training workshop to build capacity on how to address vulnerabilities to extreme heat events.
- Throughout the project, we will identify people who are interested in continuing to engage in and advocate for climate resiliency in Denver's low-income communities. The Action Plan will include strategies to engage these residents beyond the end of the grant period, including additional capacity building.

How the project is related to the environmental statutes: This project relates to Clean Air Act, Section 103(b)(3). We will be conducting an investigation related to the health effects of greenhouse gas air pollution resulting in extreme heat events, as well as the health effects of ground-level ozone which will be exacerbated by the increase in temperature. We also expect that some of the strategies for climate resiliency will result in reduced energy use (e.g. attic insulation, increasing the use of alternative transportation) which reduces air pollution, including greenhouse gas emissions, NO_x, and particulate matter.

ii. Description of how the organization and its partner(s) will work together

Role of your partners: The main collaborators for this project will be community residents Denver Environmental Health (DEH) and the Adams County Sustainability Officer. We will engage at least 112 residents in the data collection, strategy development, piloting, and action planning for the project. These residents will work directly with us to develop an action plan to address the local climate resiliency to extreme heat events. DEH and the Sustainability Officer for Adams County will help us obtain data for the vulnerability analysis, review and develop strategies to address vulnerabilities, and help identify ways to integrate these strategies into local planning efforts. Letters of Support from both organizations are attached.

Nature of the organizations and what resources they bring to the partnership: DEH is the agency within the government of the City and County of Denver tasked with environmental quality and environmental health for the residents of Denver. DEH is the lead agency for Denver's Climate Action Plan and Climate Adaptation Plan. DEH brings resources including the City's greenhouse gas inventory, climate mitigation activities, climate adaptation strategies and Environmental Management System goals; GIS layers; air quality data; and other environmental data. DEH also brings its clout with and connections to other City departments which can impact climate resiliency through their own planning and budgeting processes. Julia Ferguson is the Sustainability Coordinator for Adams County. The Sustainability Coordinator is housed within the County Manager's Office and is tasked with developing and implementing programs that improve the County's efforts in the realm of environmental, social, and fiscal sustainability. The Sustainability Coordinator brings knowledge of Adams County planning processes that impact sustainability and hazard mitigation efforts, as well as connections to other County and City departments that can provide data and input into our project.

Partners' vested interest in partnership, commitments made, and responsibilities: DEH is committed to developing and implementing robust climate resilience plans that reflect the needs and priorities of its most vulnerable communities. DEH is not receiving income from this project. A letter of support from DEH outlines their commitment to providing data on the current status of the City's greenhouse gas inventory, climate mitigation activities, climate adaptation strategies and Environmental Management System goals; GIS layers; air quality data; and other

environmental data; serving as a liaison between GWD and other City departments that participated in the Climate Adaptation Plan; and providing input from a City perspective to the strategies and action plan. Adams County Sustainability Coordinator is committed to a sustainable future for Adams County citizens and the environmental well-being of the community, which directly relates to climate resiliency. Adams County is not receiving income from this grant. A letter of support from Adams County outlines their commitment to provide us with input to the strategies and action plan for addressing vulnerabilities to extreme heat events; connect us to the appropriate departments and staff within Adams County to obtain the data needed for the initial analysis; and to provide additional feedback on the action plan as it relates to other planning processes occurring in the County.

Plans to maintain and sustain the partnerships: We will maintain and sustain our partnerships with the community through regular communication and meaningful engagement throughout the project year and beyond the grant period. The engagement during the grant period includes: interviews, initial survey, a training workshop, piloting strategies with co-benefits, prioritization surveys, and input on the action plan. Beyond the grant period, we plan to engage residents via our quarterly Spanish-language newsletter (“El Contacto Verde”) as well as other strategies determined in the Action Plan.

GWD has worked with DEH on numerous programs including energy efficiency, climate action, and recycling and we maintain a strong partnership through regular communications and project planning. GWD has worked with Adams County Sustainability Office on energy efficiency outreach and planning for youth engagement around community gardens. For both partners, we will sustain the partnership through regular communication, asking for input and feedback for each activity. We intend to continue the partnership beyond the end of the grant period to ensure that the Action Plan is implemented, anticipating at least bi-annual meetings to assess progress.

V. Organizational capacity and Programmatic Capability

The organizational and administrative systems: We utilize Quickbooks Pro accounting software and use Generally Accepted Accounting Principles. We track expenditures separately for each grant agreement and by budget line item (e.g. personnel, fringe, travel, etc.). We track staff time by project on timesheets. We are familiar with Federal draw-down procedures and fiscal reports. At any time, GWD can provide an accounting of expenditures and funds remaining in each budget area for each grant project. We have a full audit each year and an A-133 audit in 2011 (due to reaching the limit of >\$500,000 in federal funds). The auditor found that we complied with the federal requirements in all material respects.

Successful management of these projects in the past: GWD has successfully managed federally funded assistance agreements and other contracts for over ten years. We have organizational and administrative systems in place as the backbone of management; we have qualified and dedicated staff; we build authentic relationships with community members, following their lead on issues and solutions, and providing training and economic opportunities to build capacity and leadership; and we are responsive to the needs and requirements of our funding partners.

Plans to effectively manage and successfully complete this proposed project: The project manager will develop the final work plan, timeline, and evaluation plan for the project. Working closely with the project partners and stakeholders, she will evaluate the completion of tasks and evaluation measures every month to ensure that we are on track to project completion. Changes will be made on a quarterly basis if needed to adjust the work plan to meet the project goals.

Organizational experience: GWD is a non-profit organization with the mission of improving the physical environment through community-based partnerships and action. The organization was started in 2002 as part of the Groundwork USA network, after a feasibility study indicated the need for such an organization. Since inception, GWD has demonstrated its ability to engage a diversity of Denver residents, businesses and governmental entities in collaborative projects that result in environmental improvements. The organization has successfully improved urban green space, increased access to healthy foods, reduced greenhouse gas emissions, and increased recycling rates in North Denver, Commerce City and other lower-income neighborhoods. Many of the neighborhoods where we work include a large number of Spanish-speaking residents, including the target neighborhoods for this proposed grant. GWD staff is highly skilled and experienced working with the Spanish-speaking community, providing all services in both languages. GWD has 12 full-time, 4 part-time staff, and 40 youth employees. We have the facilities, technology, and communications and accounting infrastructure to successfully complete the project.

Past performance in meeting reporting requirements: GWD has successfully completed several federal grants and cooperative agreements as described in more detail in Section VII of this application. Please see Section VII for the Project Officer names and grant agreement numbers. Tasks were completed as described in the work plans, outputs and outcomes were met, and deliverables were provided to the satisfaction of program officers. GWD submitted quarterly and/or semi-annual reports, final reports and financial status reports to EPA on time and in accordance with the grant agreements.

VI. Qualifications of the Project Manager (PM)

The qualifications of the PM as they relate to the project: Wendy Hawthorne will be the PM. Wendy has been the Executive Director of GWD since late 2006. Prior to working at GWD, Wendy was the Program Director for the Healthy Homes Initiative and Lead Hazard Control Program at Northeast Denver Housing Center. This Initiative included community education and outreach, training and employment of local community members, home renovations to improve health and safety, and working in partnership with other agencies serving the community. Since taking the Director role at GWD, Wendy has continued to build relationships with the community as demonstrated through numerous successful programs and projects. Since 1999, Wendy has demonstrated her ability to complete impactful projects, on time, and meeting milestones and outputs. She has also demonstrated her ability to ensure a collaborative process between governmental agencies and the community, and to bring the technical, financial and human resources necessary to achieve results.

PM ties to the community and organization: Wendy Hawthorne has committed her career to these communities for the last fifteen years. She has been the Executive Director of GWD since 2006 and prior to this (1999 to 2006), she was the Program Director for the Health Homes Initiative. In both of these roles, she has tirelessly partnered with residents to obtain the resources to implement projects that are meaningful to the community. She has worked directly training residents to collect lead samples, and to conduct energy audits and outreach. She has worked in hundreds of homes, assessing lead based paint hazards, asthma triggers and energy efficiency needs. For the last eight years, she has focused on building an organization that has brought millions of dollars and thousands of hours of volunteer service, while also employing over 100 low-income youth and other residents from these neighborhoods.

Past activities that the PM has worked on with the community: The past activities that Wendy has worked on with the community include:

- Identifying houses that are high risk for lead poisoning before a child is poisoned by developing and implementing an innovative sidewalk survey tool.
- Testing exterior paint of hundreds of homes to enable lead hazard cleanup as part of the VB/I-70 Superfund cleanup.
- Initiating and implementing a program to assess and repair hundreds of homes to reduce lead risk and asthma triggers.
- Training community members to identify and test for lead hazards in their own communities.
- Building a youth employment program that now employs over 60 youth from Denver's low-income neighborhoods to conduct environmental and community improvement projects.
- Building an energy efficiency program that helps over 300 households per year reduce their energy bills and greenhouse gas emissions.
- Initiating the Platte Farm Open Space Steering Committee to lead the transformation of 5 acres of vacant, formerly contaminated land into a park.
- Training residents to conduct air quality monitoring to identify the components of industrial air pollution impacting north Denver.
- Growing GWD from a \$200,000 per year budget to a \$1.5 million per year budget, correlated with growing impact, growing number of youth jobs, and increased resources to address community environmental and public health issues.

VII. Past Performance Reporting on Outputs and Outcomes

Grant Title	Agreement	Amount	Contact
Housing-based Approach to Reducing Childhood Lead Poisoning in Rural Colorado	X897887101 (EPA)	\$96,752	Michelle Reichmuth 303-312-6966
Globeville Air Quality Outreach and Solutions	EQ-96815901 (EPA)	\$25,000	April Nowak 303-312-6528
Climate Showcase Grant (GWD was subcontractor to the City of Denver for EPA-funded project)	GC03003 (City of Denver)	\$150,000	Liz Babcock 720-913-1516
Lower Bear Creek Watershed Planning and Assessment (319 Funds via State of Colorado)	12FAA43274 (CDPHE)	\$70,000	Tammy Allen 303.692.3554

How progress towards achieving the expected outputs and outcomes was documented: Outputs were tracked on the timeline submitted with the work plans, and reported as outlined in the grant agreement. Short term outcomes were reported in final reports. In many cases, long-term outcomes are still being tracked as these are important ongoing outcomes for GWD. For example, the City of Denver requested quarterly reports from GWD for its Climate Showcase grant. We provided them with outputs including the number of households we reached with energy efficiency information, the number of incandescent bulbs swapped for compact fluorescent bulbs, the number of families signed up for recycling and free trees, and the number of families referred for full weatherization services. At the end of the grant period, we calculated outcomes including the CO₂ emissions reductions and money saved.

Documentation to explain why progress not made: Not applicable.

VIII. Quality Assurance Project Plan: Based on the questionnaire in Appendix I of the instructions, we believe that a QAPP will be necessary.